## 20<sup>th</sup> meeting of the

# **IOWA FREIGHT ADVISORY COUNCIL**

December 1, 2017 10:00 AM to 2:00 PM **Courtyard Marriot** 2405 SE Creekview Dr, Ankeny, IA 50021

Kim Engle (Cryotech)

Shashaanka Ashili (Smart Drivinc)

| Members            |                                    |   |                         |
|--------------------|------------------------------------|---|-------------------------|
|                    | Col. Craig Baumgartner             | Х | Calean Kokjohn          |
| Х                  | Reilly Vaughan for Joel Brinkmeyer |   | Ron Lang                |
| Х                  | Kevin Burke                        | х | Don McDowell            |
| Х                  | Tom Determann                      | Х | Delia Moon-Meier        |
| Х                  | Greg Dickinson                     |   | Joe Parsons             |
|                    | Randy Draper                       | Х | Amy Homan for Dan Sabin |
| Х                  | Sarod Dhuru                        |   | Scott Stabbe            |
| Х                  | Don Egli                           | х | Mike Steenhoek          |
| Х                  | Kevin Ekstrand                     |   | Kris Vander Kamp        |
| Х                  | Bill Horan                         |   | Ron White               |
|                    | Greg Jenkins                       | Х | Tim Woods               |
| Ex-Officio Members |                                    |   |                         |
|                    | Todd Ashby                         |   | Paul Ovrom              |
|                    | Karen Bobo                         |   | Robert Palmer           |
| Х                  | Mike Hadley                        | х | Joseph Rude             |
| Х                  | Sean Litteral                      | Х | Brett Tjekes            |
|                    | Shirley McGuire                    |   | Cecil Wright            |
|                    | Mike Norris                        | Х | Jennifer Wright         |
| Iowa DOT           |                                    |   |                         |
| Х                  | Ose Akinlotan                      |   | Scott Marler            |
| Х                  | Stu Anderson                       | Х | Amanda Martin           |
| Х                  | Phou Baccam                        | Х | Diane McCauley          |
|                    | Mikel Derby                        | Х | Phil Meraz              |
| Х                  | Sam Hiscocks                       | Х | Phil Mescher            |
| Х                  | Laura Hutzell                      | Х | Tammy Nicholson         |
| Х                  | Alex Jansen                        | х | Garrett Pedersen        |
|                    | Renee Jerman                       | х | Charlie Purcell         |
| Х                  | Dean House for David Lorenzen      | х | Brad Hofer              |
|                    | Mark Lowe                          | х | John Narigon            |
| Х                  | Craig Markley                      | х | Tina Greenfield Huitt   |
| Guests             |                                    |   |                         |

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Gary Gleichman (Cryotech)

Kavi Chawla (Smart Drivinc)

#### 10:00 AM Safety Briefing

Amanda Martin lowa DOT

#### **Welcome and Introductions**

Tom Determann, Chair

Council ice-breakers:

- What do you think is the biggest challenge for freight movement in 2018?
- Is there anything we should consider for the next agenda or for the next meeting?

Amanda Martin opened the meeting with a safety briefing. Tom Determann, Chair of the FAC, then led introductions and ice-breaker topics discussed by the group. Each member was asked, "What do you think is the biggest challenge for freight movement in 2018?" and "What critical or emerging issues are you experiencing in your industry? Is there anything we should consider for the next agenda or for the next meeting?"

#### Responses included:

- Tim Woods identified highway safety and distracted driving as major challenges.
- Tom Determann echoed that distracted driving is an issue and added the driver shortage in the trucking industry is still an issue.
- Don McDowell mentioned exemptions and flexibility for livestock haulers from electronic logging is needed to help increase efficiencies.
- Don Egli added exemptions and flexibility is also needed for hours of service regulations for livestock haulers. He also mentioned that the Federal Motor Carrier Safety Administration is considering the hours of service issue. They are considering going back to the split sleeper cab arrangement again that allows for two drivers to split the driving time in a single truck.
- Tom Determann identified a Federal infrastructure update and examining the hours of service flexibility as potential topics for the next meeting.

#### 10:20 AM Iowa DOT Updates

Stu Anderson lowa DOT

Miscellaneous updates from the Department.

Craig Markley and Stu Anderson provided an update on Iowa DOT activities and other freight-related initiatives taking place at the State and Federal level. Mr. Markley began by giving an update on Iowa DOT's Linking Iowa's Freight Transportation System (LIFTS) program. LIFTS originated following unsuccessful attempts to establish a State-funded freight grant program and a successful pilot program that utilized repurposed State Infrastructure Bank money in 2015-2016. This pilot program received 25 applications for grants, six of which were funded. The current LIFTS program is utilizing flexible funding from the National Highway Freight Program (part of the Fixing America's Surface Transportation Act). Mr. Markley then mentioned Iowa DOT received nine pre-applications this round, most of which focused around truck-to-rail intermodal improvements. The process going forward is to review the pre-applications internally, provide

formal comments, and then receive the full applications. These will then be reviewed and scored by a committee with award selections coming in early 2018.

Next, Mr. Markley provided an update on the Upper Mississippi River Alternative Financing Study being completed by Iowa DOT and HDR. Iowa DOT has promoted improvements to the lock and dam system for many years, including most recently in a priority infrastructure list submitted to the Trump Administration identifying upgrades to the lock and dam system as the number one priority for the State of Iowa. This has led to discussion with the Trump Administration, the U.S. Army Corps of Engineers, and other regional stakeholders. The effort is focusing on three areas: small scale improvements (such as a new mooring cell), systematic improvements, and quantifying the economic value and benefit of expanding a number of locks. Mr. Markley notified the group that HDR will be reaching out to interview stakeholders.

Mr. Anderson updated the group on the Federal-Aid swap effort that has been under development. The current federal funding that (totaling roughly \$150 million) goes to cities and counties has additional requirements compared to State funding. The concept of the Federal-Aid Swap is to keep the federal money at lowa DOT, swap it with State funds, and then distribute those to the cities and counties. This would make programming and project development simpler and more efficient for cities and counties. Mr. Anderson added that this concept has been presented to the lowa Transportation Commission (Commission) and will be discussed further at the January Commission workshop. If there is favorable input, action could be taken as early as February and the new process could potentially begin October 1, 2018.

Next, Mr. Anderson gave an overview of Iowa DOT portions of the upcoming State Legislative Session, briefly describing each item. First, Mr. Anderson notified the group that the new legislative liaison for Iowa DOT is Susan Fenton, as Mikel Derby will be shifting to only a Federal focus. He then added that Iowa DOT is planning to introduce multiple bills. These include:

- Eliminating the sunset date on Motor Vehicle Enforcement officers having the same powers as other peace officers and making those powers permanent.
- Ending a pilot program that allows Iowa DOT snow plows to have blue and white lights and making the ability permanent.
- Changing the start date of Iowa transportation commissioners from May 1<sup>st</sup> to July 1<sup>st</sup> to better align with development and approval of the Iowa DOT Five-Year Program.
- Eliminating the sunset language and making permanent a regulation related to CDL skills testing by 3<sup>rd</sup> party, lowa-based motor carriers.
- Adjusting a state law related to the use of mobile devices by motor carrier operators.

Tom Determann asked about the potential for the federal fuel tax to be raised. Mr. Anderson added that there is a lot of discussion to raise it and clarified that, if it is raised, it may alleviate Congress from having to find other funding to transfer over to be used for roads and bridges; it may not actually mean there will be more total money available. Mike Steenhoek added that he has heard of many people and members of Congress that now support raising the fuel tax that wouldn't have been in support of it five years ago. He added that lowa DOT stakeholder groups have been making the case for a while and it is starting to resonate.

Mr. Steenhoek asked which other items were included on the infrastructure priority list submitted to the Trump Administration Transition Team and what was specifically asked for. Mr. Anderson answered that the Administration asked every state to submit their top five priorities and Iowa submitted in December 2016. The list included: Upgrades to the lock and dam system, I-80/380 interchange reconstruction, Cedar Rapids

flood mitigation, Des Moines International Airport terminal expansion, and the Lewis and Clark area water supply.

Bill Horan asked if any part of the Upper Mississippi River discussions have included the optimal size of barge tows, specifically, "If 600 ft. locks were replaced with 1,200 ft. locks, would the tows then get longer?" Mr. Steenhoek responded by saying it would be unlikely due to the serpentine nature of the river which would make maneuvering difficult.

#### 10:40 AM I-80 Planning and Environmental Linkage Study

Update on recently completed and ongoing technical memos.

Tammy Nicholson lowa DOT

Tammy Nicholson presented on the latest technical memo produced as part of the I-80 Planning and Environmental Linkage (PEL) Study. This memo investigates the potential for tolling on the rural sections of I-80 in Iowa. Ms. Nicholson began with some background on the overall PEL effort. The purpose is to define a vision for I-80 and to assist in making corridor-level, big picture decisions. A number of technical memos have been completed to date, with more under development.

The Tolling and Alternative Financing technical memo looks at financial options to pay for needed I-80 improvements. The study was also intended to answer questions related to the optimal improvement strategy (widening to six general-purpose lanes or four truck lanes with six general-purpose lanes), how fast the strategy could be implemented, and whether or not the strategies are financially feasible with toll funding. Before going into more detail on the process and results, Ms. Nicholson asked the group for input via an exercise. Members were asked to use post-it notes to write down thoughts on the benefits and challenges of tolling. These were later grouped and summarized.

Next, Ms. Nicholson discussed the specifics of the memo, identifying the main purpose was to recommend an improvement strategy and an implementation plan. Each potential improvement strategy was overviewed, as well as the funding options (pay-as-you-go vs tolling) and construction scenarios. The tolling concept, which was found to be financially feasible, included an open road concept (some local travel toll-free), only the rural portions of I-80, 11 tolling locations statewide, and different toll charges for autos and trucks. Ms. Nicholson also covered details relating to the financial analysis and the overall benefits and challenges of tolling. Next steps include publishing the memo, gathering more stakeholder input, and continuing with the other PEL technical memos.

#### 11:20 AM Rest Area Management Plan

Brad Hofer lowa DOT

Overview of the Plan and the truck parking implications related to the effort, as well as soliciting input on truck parking mitigation ideas.

Brad Hofer presented on the Iowa Rest Area Management Plan (iRAMP). Iowa DOT has been analyzing rest areas and parking capacity for four to five years beginning with the Rest Area Management Study in 2012-2013. Currently, Iowa DOT is gathering input related to iRAMP implementation, which produced final recommendations for future planning by ranking rest areas based on eight criteria and identified highly utilized and most critical locations.

Mr. Hofer overviewed the challenge iRAMP is trying to address, which is that between \$15-20 million has been allocated in past Iowa DOT Five-year Programs for rest area improvements and the Department needed to ensure that this was focused in the right areas. In addition, iRAMP was to investigate whether the number and location of rest areas were appropriate and make recommendations if they were not. Currently, Iowa has 37 rest areas, 16 parking only rest areas, and 1 scenic overlook. All were ranked based on spacing, presence of 24-hour alternative service locations, truck parking availability, truck parking demand, uniqueness, usage, facility age, and facility services.

Implementation recommendations included: evaluate the use of the Truck Parking Information and Management System (TPIMS) in the next 6-12 months, close one full service rest area and 14 parking only sites in years 1-5, close 9 full service rest areas and two parking only sites in years 5-15, close one full service rest area in years 15-30, and implement truck parking mitigation throughout the system. Mr. Hofer then went through the potential impacts of these closures. Nine of the remaining 26 full service rest areas are expected to experience increases in patronage due to closures and the biggest impact to the traveling public would be due to the loss in truck parking locations. With the proposed closures, approximately 279 (or 35%) of authorized truck parking spaces would be removed. Mitigation for these losses could potentially be through truck parking availability cameras and applications, adding truck parking to remaining rest areas, leveraging alternative service locations, implementing a targeted Oasis program, and/or automated truck technology.

Mr. Hofer then requested input from members on whether or not there are any specific closures that should be considered or reconsidered, specific locations outside of the overlap areas presented that should be considered for additional truck parking, any rest areas where different truck parking designs should be incorporated, and any research into automated truck technology that could be shared. Next steps include gathering input from the public and presenting to the Commission.

#### 12:00 PM Lunch

### 12:40 PM Winter Operations

**Tina Greenfield Huitt** 

**Iowa DOT** 

A general overview of winter operations in Iowa and related research initiatives.

Tina Greenfield Huitt provided an overview of Iowa DOT winter operations, including travel resources and ongoing research projects. Resources for travelers during winter weather are the Iowa 511 application, Tracka-plow, and Weatherview, all of which feature real-time data, camera imagery, and other helpful tools. Ms. Greenfield Huitt then showed screenshots of each.

lowa 511 includes winter road conditions, roadside camera views, traffic speeds, road closures, towing ban areas, and WAZE reports for drivers. Track-a-plow allows users to see where snow plows are and what they can see from their windshields using cameras. It also provides color-coded road condition reports and radar overlays. Weatherview provides roadside weather, forecasts, and camera views for users. This also includes current and forecast road temperatures, probability for frost on the roadways, bridge temperatures, air temperatures, wind speeds, and precipitation.

Next, Ms. Greenfield Huitt provided some statistics about Iowa DOT winter operations including the number of garages, snow plows, staff, tons of salt, gallons of brine, gallons of calcium chloride, and tons of sand

utilized each year and how application rates are determined. Finally, current research efforts in partnership with Iowa State University/InTrans were overviewed. These include the winter operations custom heat mapping program, winter operations dashboard, plow blade wear evaluation, and plow route optimization.

#### 1:10 PM Cryotech Deicing Technology

Presentation on deicing technology and the effects deicers have on infrastructure and equipment.

Kim Engle Gary Gleichman Cryotech

Kim Engle and Gary Gleichman provided a general overview on Cryotech and the company's deicing technology. Ms. Engle and Mr. Gleichman provided some background information on deicing and the chemistry behind corrosion and the damage certain deicing products can cause. Roadway deicer use is estimated to reduce crashes by 75-90 percent and prevent significant economic losses due to closures. Roughly 44 percent of salt produced in the U.S. is used for deicing, which has led to concerns about damage to transportation infrastructure, the natural environment, and motor vehicles.

Mr. Gleichman concluded the presentation by going over non-salt deicing options that include sand, sodium chloride, calcium chloride, magnesium chloride, CMA, sodium acetate, potassium acetate, formatess, urea, and other alternative products. He also promoted the "tool box approach" which involves the use of better technology, sharing of best management practices, and targeted use of non-chloride deicers.

#### 1:35 PM Smart Driving

Introduction and overview of an lowa-based startup company focused on connected vehicle technologies.

Shashaanka Ashili, CEO Smart Drivinc

Shashaanka Ashili provided information on his company, Smart Drivinc, and the tools they have available to assist with distracted driving issues for passenger vehicles and trucking fleets. Mr. Ashili gave an overview of their solution, which comes in the form of a tool that limits the applications that can be used on a driver's phone while other passengers in the vehicle have complete use of their devices. The tool attaches to the windshield and creates a smart zone surrounding the driver. Overall limitations can be set by the fleet manager.

Mr. Ashili then described another ongoing effort to address the lack of hauler-container synchronization at ports. The solution for Smart Drivinc is to utilize removable tags to track shipping containers and inform container haulers in real-time. This could help predict container departure time and optimize movements.

#### 2:00 PM Adjourn

2018 meetings: March 2<sup>nd</sup>, June 8<sup>th</sup>, September 14<sup>th</sup>, December 14<sup>th</sup>